agitating the bearing component and/or hard particles to produce relative movement therebetween, the hard particle abrasion being performed for between 10 minutes and 1 hour, preferably 30 minutes, to improve the surface topography of the component to increase the compressive stress in the surface of the component by between 200 mPa and 500 mPa and to enhance the rolling contact fatigue life of the component by at least 12 times.

REMARKS

Claims 1-4, and 11-16 have been rejected under 35 U.S.C. § 112, second paragraph. The claims have been amended to obviate this rejection.

Claims 1-2, 4, 11, and 14-16 have been rejected under 35 U.S.C. §102(b) as being clearly anticipated by Wood, British Patent No. 227277. Claim 13 has been rejected under 35 U.S.C. §103(a) as being unpatentable over either Hashimoto, U.S. Patent No. 5,873,770 or Wood 227277.

The Examiner's rejections are respectfully traversed.

As amended, the claims are directed to a method of using non-corrosive hard particle abrasion to treat a rolling element bearing component. The hard particle abrasion includes immersing the bearing component in a receptacle containing hard particles and agitating the bearing component and/or hard particles to produce relative movement therebetween. The hard particle abrasion being performed for between 10 minutes and 1 hour, preferably 30 minutes, to improve the surface topography of the component to increase the compressive stress in the surface of the component by between 200 mPa and 500 mPa and to enhance the rolling contact fatigue life of the component by at least 12 times.